



200328

000001

MASTER METALS

BACKGROUND: MM is approx 4.3 acres. Located downtown Cleveland, in heavy industrial area. The Cuyuhoga River is approx 1500 ft to the east. Playground/athletic field 1500 ft to the west, Residential area is 2000 ft to the NW. MM operated as a secondary lead smelter.

REASON FOR ADDITIONAL RESPONSE ACTION:

- To determine the characteristics, extent, and magnitude of contamination at the site;
- To evaluate the nature and magnitude of contamination on site, in the nearby surface waters, and off site areas.
- To determine if the site poses a threat to human health or the environment.
- To define the pathway of migration from the site presently.

1. These areas (River, playground/athletic field and residential areas) have not been characterize fully to determine if there is a potential threat to human health and the environment. Contaminated soils found on Holmden Avenue 61 samples taken and the majority were found above the cleanup level of 300 ppm for total lead.

2. The facility has had a long history of non compliance, poor operating practices.

3. We have documented releases of hazardous materials to the environment. There has been several RCRA, Air and CWA violations. In January 1992 OEPA cited MM several times for the exceedance of National Ambient Air Quality Standards (NAAQS) for lead which is 1.5 ug/m³ on a quarterly average. Just east of the fence near 3rd street we had qtrly avgs of 21-39 and daily concentrations as high as 117 ug/m³. This further supports the need to investigate the off site areas for air monitoring for lead.

In July 1992 USEPA's Removal Program conducted soil sampling and total lead concentrations ranged from approx 6000 ppm to 115,000 ppm. EPA's current action levels in soil range from 500 ppm to 1000 ppm. This supports the need for additional soil samples on site and for soil samples off site because of the high concentration of pb found on site.

Groundwater samples taken at the site in February 1991 showed that MCLS (.05 mg/l) were exceeded for lead in several monitoring wells. This supports our request that at least seven to ten additional monitoring wells need to be installed.

10/1992 - OEPA AOC to restart 1 furnace immediately, with the potential to restart the other furnace, and to cease use of the underground waste acid collection tank.

1993 - Additional monitored exceedences of the lead NAAQS, and wind data, suggesting Master Metals as the source of the monitored lead NAAQS exceedences.

OSHA

1990 - Consent Decree re: worker safety practices

1993 - Master Metals' owner, Doug Mickey, pleads guilty to criminal contempt in implementing the OSHA Decree. He is sentenced to four months work-release jail, two years probation with the first year as home detention, and a \$15,000 fine.

1. 3 soil samples in the residential area near the playground and baseball field.
2. 5 soil samples in the playground near the Valley View Apts near west 3rd street.
3. 3 soil samples on the playground and baseball field near Clark.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Currently there still appears to be some potential pathway exposure because the site is not fenced entirely. Inhalation of airborne lead, trespasser exposure, contaminated material.

COSTS:

1. Clean Closure - processing of all remaining recyclables on site, with off site disposal of all hazardous and solid waste and contaminated soil cost \$3-\$5 million
2. Closure as a landfill - Process of all remaining recyclables, off site disposal of all solid waste, demolition and disposal of all structures after decon. RCRA cap to prevent future exposure and heavy metals in soils. Costs \$5-\$7 million

These costs were based on existing closure requirements for RCRA. These cost may be 30% to 50% less under the SACM program.

1. Go with a cap that is just as protective as the RCRA cap
2. Dig treat only the hot spots.
3. Fence off and put up signs so that the site isn't a threat.

SCOPE OF WORK

A. Waste Material Sampling: we need at least 20 borehole samples collected in and below the waste material at the site. Objective:

- To determine the types, and []s of contaminants in the waste

material;

- **To determine the quantity of waste materials; and**
- **To determine the vertical depth of contamination in the underlying soils.**

12 borehole samples should be conducted in the off site areas.

B. Soil Sampling: we need at least 20 soil samples for on site area and at least 16-20 soil samples for the off site areas. Objective:

- **To determine the type of contaminants present in the soils at the site and off site;**
- **To determine extent of soil contamination vertically and horizontally with emphasis on lead (arsenic)?**
- **To determine contamination migration pathways.**

C. Monitoring Well water sampling: Sample all existing monitoring wells and install three monitoring wells off site and at least two background wells. Objective:

- **To determine the extent of contamination in the groundwater, in the projected downgradient direction from the waste materials;**
- **To establish a background for groundwater quality especially for lead.**

D. Residential Well Water Sampling: we need to sample all residential wells that are located near the site.

E. Surface Water Sampling: we need to take at least 3-4 surface water samples of the river. Objective:

- **To determine whether or not surface water acts as a contaminant migration pathway**
- **To determine if contaminants is in surface water runoff**

E. Sediment Sampling: a total of 3-4 sediment samples should be collected. Objective:

- **To determine if contaminants exist in the sediments of the river**
- **To determine off site migration.**